



Davao del Sur State College
Brgy. Matti, Digos City, Davao del Sur

PRODUCT DEVELOPMENT AND TECHNOLOGY

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PREFACE

This coursepack on Product Development and Technology is designed to provide a comprehensive and practical foundation for understanding how products - both food and non-food are conceived, developed, and brought to market. It bridges the gap between theoretical principles and real-world application, equipping students with the analytical and creative tools necessary to respond to consumer needs, harness technology, and drive meaningful innovation in an ever-evolving global landscape.

The curriculum is structured to guide students through the essential pillars of product development. It begins with a foundational exploration of product development concepts and the role of technology in modern innovation, establishing a clear understanding of how ideas evolve into market-ready solutions. As the modules progress, the focus shifts to the design and development of non-food products, covering consumer research, prototyping, costing, and sustainable packaging. Students then enter the realm of food technology, exploring food systems, safety principles, processing methods, formulation, and preservation techniques, before advancing into the critical areas of packaging, labeling, branding, and commercialization.

Ultimately, this coursepack aims to develop forward-thinking learners capable of transforming ideas into viable, market-competitive products. Through a combination of technical knowledge, sensory evaluation, entrepreneurial thinking, and an introduction to emerging trends in food and non-food innovation, students will gain the confidence to address both traditional development challenges and the exciting opportunities of the future. Whether the goal is entrepreneurship or a career in industry, these modules serve as a vital roadmap for achieving excellence in product development and technology.

— JAN CHRISTIAN D. ENERO —

— REGIE D. PATAGOC —

Authors



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